



UNITED STATES PATENT AND TRADEMARK OFFICE

Tel

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,420	03/12/2004	Yung-yu Chiu	Q1198	7129
34335	7590	06/22/2005	EXAMINER	
LAW OFFICES OF DAVID PAI 1001 FOURTH AVENUE, SUITE 3200 SEATTLE, WA 98154			LE, DANG D	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/799,420

Applicant(s)

CHIU ET AL.

Examiner

Dang D. Le

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
4a) Of the above claim(s) 15-22 and 24-26 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-14, 23, 27 and 28 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/3/05 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-14, 23, 27, and 28 have been considered but are moot in view of the new ground(s) of rejection.

Election/Restrictions

3. Newly submitted claims 24-26 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the claims contain similar subject matter in claims 16, 17, and 20, respectively. Claim 12 is generic claim.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 24-26 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 12-14 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 12, because of the term "optionally" at line 2 from bottom of the claim, it is not clear if the shaft is definitely claimed to protrude from the bottom planar surface of the fan base or not.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 5-11 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmider et al. (5,176,509).

Regarding claim 5, Schmider et al. shows a fan motor structure (Figure 5), comprising:

- A stator (10), which comprises:
- A fan base (1); and
- A bearing assembly (12) mounted on the fan base; and
- A rotor (14, 15), which comprises:

Art Unit: 2834

- A fan hub (2) formed with an extrusion (around 13) protruding from an outer planar surface of the fan hub; and
- A shaft (13) fit into the bearing assembly (12) and connected to the fan hub, the bearing assembly (12) having one end (bottom, near 12) protruding from the bottom surface of the fan base (1), and the shaft having one part (near 13) enclosed by the extrusion of the fan hub.

Regarding claims 6, 8-10, and 28, it is noted that Schmider et al. also shows all of the limitations of the claimed invention.

Regarding claim 7, it is noted that Schmider et al. also shows an extrusion protruding from the bottom planar surface of the fan hub (near and below 14).

Regarding claim 11, it is noted that Schmider et al. also shows the bearing seat (11)

8. Claims 12, 14 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller et al. (4,164,690).

Regarding claim 12, Muller et al. shows a fan motor structure (Figure 3), comprising:

- A stator (26-29), which comprises:
- A fan base (11);
- A bearing assembly (36, 50, 51) mounted on the fan base; and
- A rotor (25), which comprises:
- A shaft (37) fit into the bearing assembly
- A fan hub (58); and

- A sleeve (57) embedded between the shaft (37) and the fan hub (58)
- Wherein, the shaft has one end (top) protruding from a top planar surface of the fan hub to form an extension portion enclosed by and in close connection with the sleeve (57) for enhancing the connection strength between the hub and the shaft; and optionally (not required) the shaft has another end protruding from the bottom planar surface of the fan base.

Regarding claims 14 and 23, it is noted that Horiuchi et al. also shows all of the limitations of the claimed invention including the bearing (50), bearing seat (52), and blade 63).

9. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Papst et al. (3,777,191) and Taniguchi et al. (6,137,197), individually.

Regarding claim 12, Papst et al. shows a fan motor structure (Figure 1), comprising:

- A stator (30), which comprises:
- A fan base (15);
- A bearing assembly (17-19) mounted on the fan base (at 16); and
- A rotor (46, 47, 52, 42, 41), which comprises:
 - A shaft (25) fit into the bearing assembly
 - A fan hub (42); and
 - A sleeve (41) embedded between the shaft (25) and the fan hub (42)
- Wherein, the shaft has one end (left in Figure 1) protruding from a top planar surface of the fan hub to form an extension portion enclosed by and in close

Art Unit: 2834

connection with the sleeve (41) for enhancing the connection strength between the hub and the shaft; and optionally (not required) the shaft has another end protruding from the bottom planar surface of the fan base.

Regarding claim 12, Taniguchi et al. shows a fan motor structure (Figure 1), comprising:

- A stator (7), which comprises:
- A fan base (6);
- A bearing assembly (5) mounted on the fan base; and
- A rotor (17, 18, 15, 16, 12), which comprises:
 - A shaft (2) fit into the bearing assembly
 - A fan hub (15); and
 - A sleeve (12) embedded between the shaft (2) and the fan hub (15)
- Wherein, the shaft has one end (top) protruding from a top planar surface of the fan hub to form an extension portion enclosed by and in close connection with the sleeve (12) for enhancing the connection strength between the hub and the shaft; and optionally (not required) the shaft has another end protruding from the bottom planar surface of the fan base.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 1-4 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hishida et al. (5,160,866) in view of Muller (Re. 34,268).

Regarding claim 1, Hishida et al. shows a motor structure, comprising:

- A stator (218), which comprises:
- A base (208);
- A bearing assembly (210, 216) mounted on the fan base; and
- A rotor (206), which comprises:
- A hub (222) formed with an extrusion (Figure 9) protruding from a top planar surface (216) of the hub; and
- A shaft (204) fit into the bearing assembly and connected to the hub, the shaft having one end (top) protruding from the top planar surface of the fan hub to form an extension portion enclosed by and in close connection with the extrusion of the hub;

- Wherein the height of the extension portion is approximately equal to the height of the extension of the hub (Figure 9).

Hishida et al. does not show the motor being a fan motor. Hishida et al. shows the motor being used for rotating a recording disk.

Muller shows the motor can be easily made either for rotating a recording disk (Figure 1) or for rotating a fan impeller (Figures 2-5) for the purpose of reducing heat.

Since Hishida et al. and Muller are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the motor as a fan motor by adding the fan blade on the rotor hub as taught by Muller for the purpose discussed above.

Regarding claims 2-4, it is noted that Hishida et al. also shows all of the limitations of the claimed invention including bearing seat (groove 212a).

Regarding claim 27, it is noted that Muller also shows all of the limitations of the claimed invention including the fan blades (23a).

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller et al. in view of Huang et al. (6,509,666).

Regarding claim 13, Muller et al. shows all of the limitations of the claimed invention except for the copper bushing.

Huang et al. uses copper bushing for the purpose of making a motor fan.

Since Muller et al. and Huang et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the bushing of copper as taught by Huang et al. for the purpose discussed above.

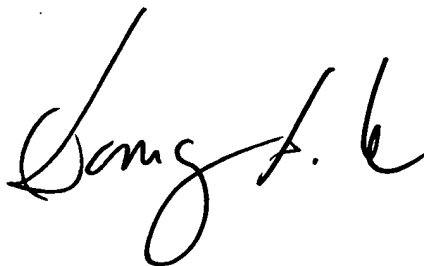
Information on How to Contact USPTO

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D. Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/18/05

A handwritten signature in black ink, appearing to read "Dangle", written in a cursive style.

DANGLE
PRIMARY EXAMINER